DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-015089
Date Inspected: 16-Jun-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	ZPMC and ABF	**CWI Present:**	☑ Yes ☐ No
Inspected CWI report:	☑ Yes ☐ No ☐ N/A	**Rod Oven in Use:**	☑ Yes ☐ No ☐ N/A
Electrode to specification:	☑ Yes ☐ No ☐ N/A	**Weld Procedures Followed:**	☑ Yes ☐ No ☐ N/A
Qualified Welders:	☑ Yes ☐ No ☐ N/A	**Verified Joint Fit-up:**	☑ Yes ☐ No ☐ N/A
Approved Drawings:	☑ Yes ☐ No ☐ N/A	**Approved WPS:**	☑ Yes ☐ No ☐ N/A
		Delayed / Cancelled:	☐ Yes ☑ No ☐ N/A

Bridge No: 34-0006
Component: OBG 13 section

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #13

Caltrans QA observed ZPMC two NDT level II technicians performed angle beam UT on six CJP stiffener welds of 13 section grillage mock up. The metrical of stiffener plates are ASTM 709 345 wall thickness from 100mm and 75mm. The test surface has been cleaned. A250mm range reflection has calibrated on “A scan” digital display instrument Parametric model Epoch XT, an angle beam search unit, is an angle wedge 45 and 70 degrees applied a source of shear waves, and passes through base weld for the detection of discontinuities. The distance and sensitivity of straight beam and angle beam are calibrated with the International Institute of welding (IIW) ultrasonic reference block. The six CJP stiffener welds have been rejected by ZPMC UT according to AWS D1.5 section 6, table 6.3 criteria.

Bay #14

Caltrans QA Inspector observed two welders performed FCAW fillet weld process on stiffeners that connected to T-joint steel plate PL3390A of side plate #SP3098A with 22mm wall thick. The minimum preheat and maximum interpass temperature requirements for FCAW fillet weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QA Inspector observed a welding operator in process of semi-automatic SAW on CJP butt joint weld. The CJP weld is attached to 100mm wall thick base plate of 13AE section of east line. The weld number and plate number are BP-3031-001-002/PL3218B and PL3219B (side B). The semi-automatic saw process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QAI observed a ZPMC heat straightening operator performed heat straightening with ZPMC Heat Straightening Report (HSR) #8637 on base plates. The base plates ID are PL3217D and PL3218D with 100mm wall thick. The heating temperature is maximum 650 C (1200 F) and cool in still air. All the plates for heat straightening have been inspected and recorded by ZPMC QC. Based on Caltrans QAI observation, no discrepancies were noted.

Bay #16

Caltrans QA Inspector observed a welding operator in process of semi-automatic SAW on CJP butt joint weld. The CJP weld is attached to 100mm wall thick base plate of 13AE section of west line. The weld number and plate number are BP3074-001-005/PL3361C and PL3361C (side A). The semi-automatic saw process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.
Caltrans QAI observed a ZPMC heat straightening operator performed heat straightening with ZPMC Heat Straightening Report (HSR) #8640 on base plates. The base plates ID are PL3363C and PL3364C with 100mm wall thick. The heating temperature is maximum 650 C (1200 F) and cool in still air. All the plates for heat straightening have been inspected and recorded by ZPMC QC. Based on Caltrans QAI observation, no discrepancies were noted.

CLOSING STATEMENT

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As notes within report above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 15000026784 , who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer